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Jerry W. Herndon IBM Corporation T81/503 PO Box 12195 Research Triangle Park, NC 27709				
EXAMINER				
MATTIS, JASON E				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/824,298

Applicant(s)

HAGGAR ET AL.

Examiner

JASON E. MATTIS

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 April 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10, 12 and 46-48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 5-8, 10, 12 and 46-48 is/are rejected.
- 7) ☒ Claim(s) 3, 4 and 9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/C)
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date: _____

DETAILED ACTION

1. This Office Action is in response to the Amendment filed 4/8/08. New claim 48 has been added. Claims 1-10, 12, and 46-48 are currently pending in the application.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 2, 7, 8, 10, 12, and 46-48 are rejected under 35 U.S.C. 102(e) as being anticipated by Engel et al. (U.S. Publication US 2003/0005144 A1).

With respect to claim 1, Engel et al. discloses a method in a data processing system for managing traffic in a network data processing system **(See the abstract of Engel et al. for reference to controlling the communication of packets in a data network)**. Engel et al. also discloses monitoring, at a server, the traffic for a plurality of TCP connections or UDP associations through a given network path **(See page 4 paragraphs 46-47, page 5 paragraph 54, and Figure 2 of Engel et al. for reference to a network server 170 monitoring traffic for multiple TCP connections and UDP**

associations through a selected port connected to a network path). Engel et al. further discloses prior to sending a packet on a particular TCP connection or UDP association, determining if the packet will cause the traffic for the network path to exceed a level of traffic allowed **(See page 9 paragraphs 98 and 101 and Figure 7 of Engel et al. for reference to prior to sending a new data packet, determining if the new data packet can be sent over through the selected port to a network path without violating a shaping rule that includes an average rate and peak rate threshold for the TCP connections sent on a network path via the selected port).** Engel et al. also discloses that if the packet will cause traffic for the network path to exceed a level of traffic allowed, reducing traffic for the one particular TCP connection or UDP association based on a transmission protocol **(See page 5 paragraphs 54 and 59, page 9 paragraph 101, and Figure 7 of Engel et al. for reference to the rules being dependent on the type of protocol, and for reference to if a new data packet does not conform to the average data rate and peak data rate, delaying transmission of the packet thereby reducing the amount of traffic currently sent over the network path through the selected port).**

With respect to claim 7, Engel et al. discloses a method in a data processing system for managing traffic in a network data processing system **(See the abstract of Engel et al. for reference to controlling the communication of packets in a data network).** Engel et al. also discloses monitoring, at a server, the traffic for a plurality of TCP connections or UDP associations through a given network path **(See page 4 paragraphs 46-47, page 5 paragraph 54, and Figure 2 of Engel et al. for reference**

to a network server 170 monitoring traffic for multiple TCP connections and UDP associations through a selected port connected to a network path). Engel et al. further discloses prior to sending a packet on a particular TCP connection or UDP association, determining if the packet will cause the traffic for the network path to exceed a level of traffic allowed **(See page 9 paragraphs 98 and 101 and Figure 7 of Engel et al. for reference to prior to sending a new data packet, determining if the new data packet can be sent over through the selected port to a network path without violating a shaping rule that includes an average rate and peak rate threshold for the TCP connections sent on a network path via the selected port).** Engel et al. also discloses further determining if the packet will cause the traffic for the selected TCP connection or UDP association to exceed its fair share amount of the network path **(See pages 4-5 paragraphs 51-54, page 9 paragraph 101, and Figure 7 of Engel et al. for reference to setting rules dependent on both a port that corresponds to a network path and a specific TCP or UDP connection such that new data packets for the TCP or UDP connection must conform to a peak and average rates for both the rule set up for the port and the rule set up for the specific TCP or UDP connection).** Engel et al. further reducing traffic for the selected TCP connection or UDP association based on a transmission protocol **(See page 5 paragraphs 54 and 59, page 9 paragraph 101, and Figure 7 of Engel et al. for reference to the rules being dependent on the type of protocol, and for reference to if a new data packet does not conform to the average data rate and peak data**

rate, delaying transmission of the packet thereby reducing the amount of traffic currently sent over the network path through the selected port).

With respect to claims 2 and 8, Engel et al. discloses that the traffic is monitored using a peak data transfer rate (See page 5 paragraph 59 of Engel et al. for reference to monitoring the peak rate of packets).

With respect to claim 10, Engel et al. discloses reducing a sending size of data packets (See pages 9-10 paragraphs 102-104 of Engel et al. for reference to sending a smaller sized data packet depending on the amount that can be sent according to the monitored peak and average data rates).

With respect to claim 12, Engel et al. discloses that the threshold takes into account a fair share bandwidth available for the plurality of TCP connections or UDP associations (See page 5 paragraph 54 of Engel et al. for reference to a rule being set to take into account a bandwidth rate corresponding to a fair share for a plurality of TCP connections).

With respect to claim 46, Engel et al. discloses further determining if the packet will cause the traffic for the selected TCP connection or UDP association to exceed its fair share amount of the network path (See pages 4-5 paragraphs 51-54, page 9 paragraph 101, and Figure 7 of Engel et al. for reference to setting rules dependent on both a port that corresponds to a network path and a specific TCP or UDP connection such that new data packets for the TCP or UDP connection must conform to a peak and average rates for both the rule set up for the port and the rule set up for the specific TCP or UDP connection). Engel et al. also reducing

traffic for the selected TCP connection or UDP association based on a transmission protocol (**See page 5 paragraphs 54 and 59, page 9 paragraph 101, and Figure 7 of Engel et al. for reference to the rules being dependent on the type of protocol, and for reference to if a new data packet does not conform to the average data rate and peak data rate, delaying transmission of the packet thereby reducing the amount of traffic currently sent over the network path through the selected port).**

With respect to claims 47 and 48, Engel et al. discloses monitoring at a source of the traffic (See page 5 paragraphs 56 and 59 for reference to monitoring at a server that is the source of the data traffic).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Engel et al. in view of Chapman et al. (U.S. Pat. 6643292 B2).

With respect to claims 5 and 6, Engel et al. does not specifically disclose setting a quality of service for packets or dropping packets.

With respect to claims 5 and 6, Chapman et al., in the field of communications, discloses setting a quality of service for packets or dropping packets (See column 8

lines 35-54 of Chapman et al. for reference to changing a packet priority, which is a quality of service level, and dropping packets with a lower priority in response to a level of data on a path exceeding a threshold). Setting a quality of service for packets or dropping packets has the advantage of providing a means to reduce the amount of traffic in a network.

It would have been obvious for one of ordinary skill in the art at the time of the invention, when presented with the work of Chapman et al. to combine setting a quality of service for packets or dropping packets, as suggested by Chapman et al., with the motivation being to reduce the amount of traffic in a network.

Allowable Subject Matter

6. Claims 3, 4, and 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The following is a statement of reasons for the indication of allowable subject matter: Claims 3 and 9 would be allowable since none of the prior art of record discloses or renders obvious the limitations regarding multiplying a bandwidth available or an amount of traffic by a dynamic variable to reduce a congestion window. Claim 4 would be allowable since it depends on claim 3.

Response to Arguments

8. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kitai et al. (U.S. Pat. 5948069) discloses another method of monitoring connections at a server.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JASON E. MATTIS whose telephone number is (571)272-3154. The examiner can normally be reached on M-F 8AM-5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Firmin Backer can be reached on (571)272-6703. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jason E Mattis
Examiner
Art Unit 2616

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